

AMENDMENTS TO THE CLAIMS:

Please amend the claims as follows:

1-7. (Cancelled)

8. (Currently Amended) A solid-state imaging apparatus comprising:

a substrate;

a first pixel formed on the substrate including a first photodiode, a first transfer transistor and a first floating diffusion;

a second pixel formed on the substrate adjacent to the first pixel including a second photodiode, a second transfer transistor and a second floating diffusion;

a reset transistor formed on the substrate; and

an amplifier transistor formed on the substrate,

wherein a gate electrode of the amplifier transistor is connected to the first floating diffusion and the second floating diffusion,

a source of the reset transistor is connected to the first floating diffusion and the source of the reset transistor is connected to the second floating diffusion, and

using the upper left corner with respect to the plane of the substrate of each of the first pixel and the second pixel as a reference point, the first photodiode and second photodiode are substantially equal in shape and intra-pixel location, and the first floating diffusion and second floating diffusion are substantially equal in shape size and intra-pixel location.

9.. (Previously presented) The solid-state imaging apparatus of claim 8, further comprising:

 a power supply interconnect; and

 an output interconnect,

 wherein the power supply interconnect is connected to a drain of the reset transistor and a source of the amplifier transistor, and

 the output interconnect is connected to a drain of the amplifier transistor.

10. (Previously presented) The solid-state imaging apparatus of claim 8, wherein the amplifier transistor is formed in the first pixel, the reset transistor is formed in the second pixel, and a distance and direction from the first photodiode to the amplifier transistor are substantially equal to a distance and direction from the second photodiode to the reset transistor.

11. (Previously presented) The solid-state imaging apparatus of claim 8, wherein a shape and size of the first pixel are substantially equal to a shape and size as that of the second pixel.

12. (Previously presented) The solid-state imaging apparatus of claim 8, wherein the solid-state imaging apparatus comprises a plurality of units, and each of the units includes only the first pixel, the second pixel, the reset transistor and the amplifier transistor.

13. (Previously presented) The solid-state imaging apparatus of claim 8, wherein the amplifier transistor and the reset transistor are formed in the second pixel and a drain of the reset transistor is a source of the amplifier transistor.

14. (Cancelled)

15. (New) A solid-state imaging apparatus comprising:

a substrate;

a first pixel formed on the substrate including a first photodiode, a first transfer transistor and a first floating diffusion;

a second pixel formed on the substrate adjacent to the first pixel including a second photodiode, a second transfer transistor and a second floating diffusion;

a reset transistor formed on the substrate; and

an amplifier transistor formed on the substrate,

wherein a gate electrode of the amplifier transistor is connected to the first floating diffusion and the second floating diffusion,

a source of the reset transistor is connected to the first floating diffusion and the source of the reset transistor is connected to the second floating diffusion, and

the first transfer transistor and the amplifier transistor are formed parallel to each other with respect to the longest edge of each of the first transfer transistor and the amplifier transistor.

16. (New) The solid-state imaging apparatus of claim 8,

further comprising a first output interconnect formed as a first-level metal interconnect;

and

a second output interconnect formed as a second-level metal interconnect.

17. (New) The solid-state imaging apparatus of claim 16,

wherein the first output interconnect and the second output interconnect are aluminum interconnects.

18. (New) The solid-state imaging apparatus of claim 8, further comprising:
a power supply contact is a tungsten plug; and
an output contact is a tungsten plug.
19. (New) The solid-state imaging apparatus of claim 8, further comprising:
a microlens formed opposed to the photodiode.
20. (New) The solid-state imaging apparatus of claim 15,
further comprising a first output interconnect formed as a first-level metal interconnect;
and
a second output interconnect formed as a second-level metal interconnect.
21. (New) The solid-state imaging apparatus of claim 20,
wherein the first output interconnect and the second output interconnect are aluminum
interconnects.
22. (New) The solid-state imaging apparatus of claim 15, further comprising:
a power supply contact is a tungsten plug; and
an output contact is a tungsten plug.
23. (New) The solid-state imaging apparatus of claim 15, further comprising:
a microlens formed opposed to the photodiode.